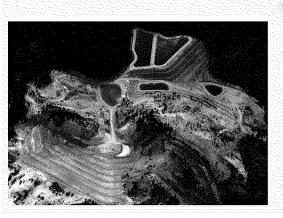


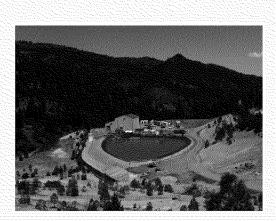
## Leviathan Mine Superfund Site Update Meeting

Julie Sullivan, Project Manager



February 2, 2018







### Agenda

- Introduction and Remedial Investigation/Feasibility Study Process
- 2. 2017 In-Review Water Collection, Treatment,
   & Construction Activities
- 3. Remedial Investigation/Feasibility Study
- 4. Leviathan Lean
- 5. Questions & Answers



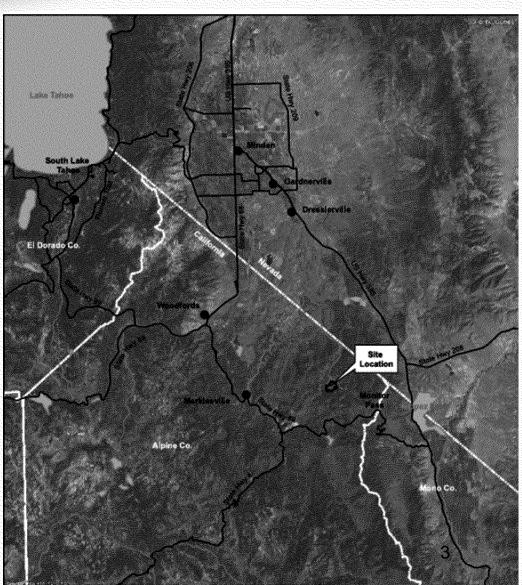
U.S. Environmental Protection Agency



#### **Leviathan Mine Site**

- Mining on and off from 1860s – 1960s
- 7000 ft elevation
- ~200 acres
- ~20 miles south of Lake Tahoe





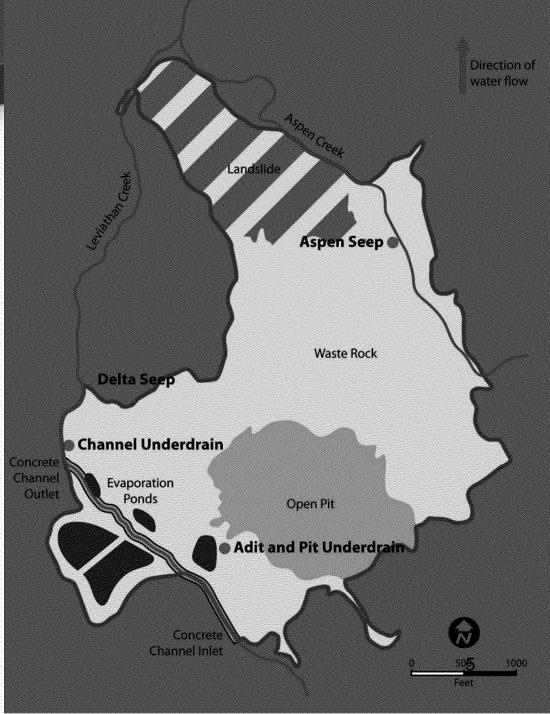


# Past & Present

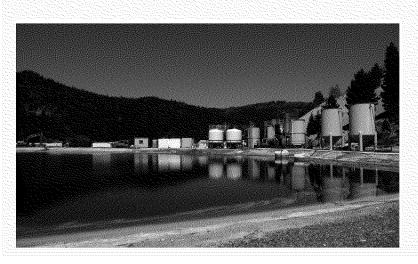


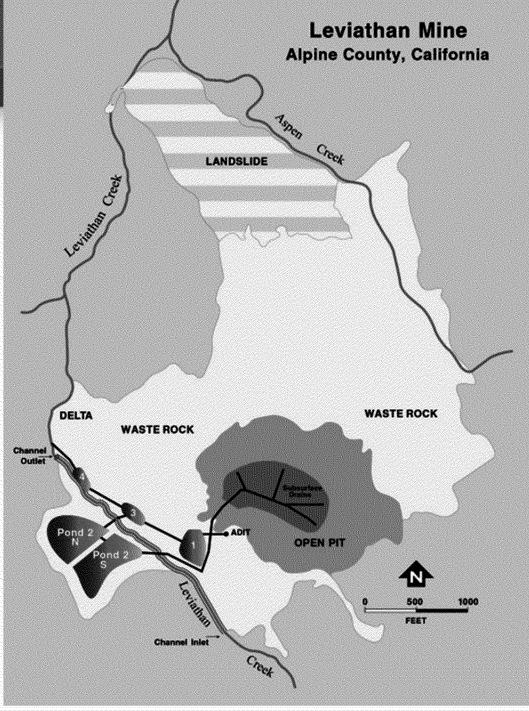
## Acid Mine Drainage Sources

- Adit
- Pit Underdrain
- Channel
   Underdrain
- Aspen Seep
- Delta Seep



# Early Interim Actions







## **Early Interim Actions Overview**

1985	1996 - present	1999 - present	2001 - 2009	2009- present
Pollution Abatement Project	Aspen Seep Bioreactor	Pond water treatment system	Lime treatment system	High-density sludge treatment system
onducted /	<b>Operated</b>	by		
Lahontan Regional /ater Quality ontrol Board	Atlantic Richfield Company	Lahontan Regional Water Quality Control Board	Atlantic Richfield Company	Atlantic Richfield Company
ontrol Board	Company	Control Board		



# Remedial Investigation and Feasibility Study (RI/FS)

#### Remedial Investigation (RI)

- Gather & evaluate historical and current data
- Determine nature and extent of waste
- Develop ecological and human health risk assessment

#### Feasibility Study (FS)

- Identify potential cleanup technologies
- Evaluate clean-up options to reduce risks
- Present recommendations for public comment

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#### **General RI/FS Process Overview**

- RI/FS conducted by Atlantic Richfield Co.
- Documents submitted to U.S. EPA and stakeholders for review
- EPA oversees, coordinates with stakeholders, comments on and approves work and submitted documents



### **Treatability Studies**

- Geotechnical Evaluation
- Interim Combined Treatment
- Revegetation Study
- Beaver Dam Complex



### **Estimated RI/FS Completion Schedule**

- Site Characterization Report December 2017
- Draft RI 2018
- Draft FS 2019
- Final RI/FS 2019/2020



#### **EPA Contact Information**

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EPA Web page:

http://www.epa.gov/superfund/leviathanmine

#### **Information Repositories**

Douglas County Library 1625 Library Lane Minden, NV 89432 (775) 782-9841 EPA Superfund Records Center 75 Hawthorne Street (3rd Floor) San Francisco, CA 94105 (415) 536-2000